

What is Claimed is:

1. In a distributed networked system having at least one service consumer and at least one service provider, a method for accessing a remote software component by a service consumer comprising:

generating a request for a component having a least one specified attribute;

broadcasting the request across the network;

receiving the request at a service provider;

comparing the at least one specified attribute of the received request with component attributes of the service provider; and

communicating a response to the requesting service consumer.

2. The method as defined in claim 1, wherein software component is selected from the group consisting of: a service, a resource, an interface, and a program segment.

3. The method as defined in claim 1, wherein the step of generating a request includes formulating a service descriptor, the service descriptor being an object that specifies the at least one specified attribute.

4. The method as defined in claim 1, wherein the step of broadcasting the request utilizes a multicast protocol for broadcasting the request across the network.

5. The method as defined in claim 1, wherein the network is a local area network.

6. The method as defined in claim 1, wherein the network is a wide area network.
7. The method as defined in claim 1, wherein the step of communicating a response utilizes a unicast protocol.
8. The method as defined in claim 1, further including the step of formulating a response by the service provider, which response includes an identification of a network location of the service provider.
9. The method as defined in claim 8, further including the step of directly requesting the component from the service provider by the service consumer, in response to the response received by the service consumer.
10. The method as defined in claim 8, wherein the step of formulating a response further includes associating with the response code for interfacing with the requested component, without requiring a driver to be separately installed on the service consumer.
11. The method as defined in claim 10, wherein the code for interfacing with the requested code is Java code in the form of a stub object.
12. A distributed networked system for accessing a remote software component comprising:

at least one service consumer;

at least one service provider;

means for generating a request at a service consumer for a component having a least one specified attribute;

means for broadcasting the request across the network;

means for receiving the request at a service provider;

means for comparing the at least one specified attribute of the received request with component attributes of the service provider; and

means for communicating a response to the requesting service consumer.

13. The system as defined in claim 12, further including means for generating the response.

14. The system as defined in claim 13, wherein the means for generating the response is configured to include within the response a mechanism for identifying a network location for the component.

15. The system as defined in claim 13, wherein the means for generating the response is configured to include within the response a code segment that allows the service consumer that generated the request to interface with the component without having a separately installed driver on the service consumer.

16. The system as defined in claim 15, wherein the code segment includes Java code in the form of a stub object.

17. The system as defined in claim 13, wherein the means for broadcasting the request includes a multicast protocol.

18. The system as defined in claim 13, wherein the means for generating a request includes a service finder.

19. The system as defined in claim 13, further including means for consolidating responses and providing the consolidated responses to the service consumer.

20. A distributed networked system for accessing a remote software component comprising:

at least one service consumer;

at least one service provider;

a mechanism configured to generate a request at a service consumer for a component having a least one specified attribute;

a mechanism configured to broadcast the request across the network;

a mechanism configured to receive the request at a service provider;

a mechanism configured to compare the at least one specified attribute of the received request with component attributes of the service provider; and

a mechanism configured to communicate a response to the requesting service consumer.